

Date: Wed, 7 Jul 93 17:38:15 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #830  
To: Info-Hams

Info-Hams Digest                      Wed, 7 Jul 93                      Volume 93 : Issue 830

Today's Topics:

(none) (3 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----  
Date: 7 Jul 93 23:33:57 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: (none)  
To: info-hams@ucsd.edu

\*\*\*\*\* UNDELIVERABLE MAIL sent to edb, being returned by bigmac!edb \*\*\*\*\*  
mail: Error # 8 'Invalid recipient' encountered on system bigmac

Received: from ucsd.edu by bigmac.cns.BrockU.CA via SMTP (920110.SGI/  
911001.SGI.UNSUPPORTED.PROTOTYPE)

for edb id AA03006; Wed, 7 Jul 93 19:33:52 -0400

Received: by ucsd.edu; id AA06612

sendmail 5.67/UCSD-2.2-sun

Wed, 7 Jul 93 13:45:27 -0700

Message-Id: <9307072045.AA06612@ucsd.edu>

Date: Sat, 3 Jul 93 04:30:20 PDT

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V93 #816

To: Info-Hams@UCSD.EDU

## Today's Topics:

1.2 GHz QUESTION (again)  
tornado last night  
TS-820 DC module?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>

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policies or positions of any party. Your mileage may vary. So there.

-----  
Date: 3 Jul 93 10:50:04 GMT

From: news.service.uci.edu!orion.oac.uci.edu!easu348@network.UCSD.EDU

Subject: 1.2 GHz QUESTION (again)

To: info-hams@ucsd.edu

I posted a similar question a few days back, but only got one response, so I'm trying again. I live in suburban Southern California and I'm thinking about buying the 1.2 GHz module for my Kenwood 741. I've heard many conflicting opinions about 1.2 band in general. I would appreciate any info. at all on this subject since I might buy the module in the next few weeks. Any little bits of information would help in my decision process. Just for info., I'd mostly be working off of high area coverage repeaters (5700 ft. elevation) out of my car. Thanks for the help in advance.

--

Andrew Parker | KD6TGM | easu348@orion.oac.uci.edu

-----  
Date: 2 Jul 93 23:03:04 MDT

From: usc!cs.utexas.edu!utah-morgan!hellgate.utah.edu!peruvian.cs.utah.edu!  
erobins@network.UCSD.EDU

Subject: tornado last night

To: info-hams@ucsd.edu

In article <1993Jul2.165045.10832@hemlock.cray.com> dadams@cray.com writes:

>

>Is there a role for Hams in situations like these?

>

>Tornado last night.

>

>get through. Several cars had been smashed by trees. Around  
>the corner one car had been picked up and smashed down on top of  
>another. Telephone poles all down the street had been snapped  
>in three places as if they had been toothpicks. Fire trucks,

Only a tornado could lift a car -- and only a tornado or a hurricane  
could do that much damage to the neighborhood. Sounds like you've got  
something to tell your grandchildren about!

>

>David, NOWWN (from work)

>

>--David C. Adams Statistician Cray Research Inc. dadams@cray.com

> -Sourdough and Ham- - Minnesotans for Global Warming! -

> (&gardner)

>

Down in Austin they bring up the "Central Texas WeatherNet" when the weather  
gets looking like that (don't remember the frequency, somewhere in the 2m  
band). Lots of hams get on and report conditions at their location. A lot  
of fun to listen to when the clouds get dark...

-----

Date: 3 Jul 93 05:02:27 GMT

From: news.service.uci.edu!ucivax!gateway@network.UCSD.EDU

Subject: TS-820 DC module?

To: info-hams@ucsd.edu

Anyone know much about the TS 820 vs the TS 520 power supply, or  
the DC module connections? I have a friend who would like to put  
a DC module on his 520. He does not have the manual. I have the  
520 with a manual, but we don't know how similar or different  
these things are.

Anyone have the TS 820 manual (copy) that they could part with?  
Anyone ever put a DC module on an 820?

Thanks

Clark

.....

Clark Savage Turner, Graduate Student Researcher

Safety Critical Software Group                      home:  
Department of Info. and Computer Science   1514 Verano Place  
Irvine, CA. 92717                                      Irvine, CA. 92715  
(714) 856 4049                                      (714) 856 2131

WA3JPG, QRP #3526, active on HF, VHF and UHF.  
ARRL Volunteer Counsel

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End of Info-Hams Digest V93 #816

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Date: 7 Jul 93 23:52:05 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: (none)  
To: info-hams@ucsd.edu

\*\*\*\*\* UNDELIVERABLE MAIL sent to edb, being returned by bigmac!edb \*\*\*\*\*  
mail: Error # 8 'Invalid recipient' encountered on system bigmac

Received: from ucsd.edu by bigmac.cns.BrockU.CA via SMTP (920110.SGI/  
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for edb id AA03405; Wed, 7 Jul 93 19:51:55 -0400

Received: by ucsd.edu; id AA06626

sendmail 5.67/UCSD-2.2-sun

Wed, 7 Jul 93 13:45:37 -0700

Message-Id: <9307072045.AA06626@ucsd.edu>

Date: Sun, 4 Jul 93 04:30:13 PDT

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V93 #818

To: Info-Hams@UCSD.EDU

Info-Hams Digest                      Sun, 4 Jul 93                      Volume 93 : Issue 818

Today's Topics:

1.2 GHz QUESTION (again) (2 msgs)

Center-Fed Antennas

Daily Solar Geophysical Data Broadcast for 03 July

FT-202R

Repeater coordination, complaints?

REQUESTING CUSTOM CALLSIGNS ???

RG-58 coax cable vs. RG-223  
travel to europe license questions  
Two-Line Orbital Element Set Format

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herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.  
-----

Date: Sat, 3 Jul 1993 18:12:03 GMT  
From: psinntp!iat.holonet.net!bwilkins@uunet.uu.net  
Subject: 1.2 GHz QUESTION (again)  
To: info-hams@ucsd.edu

easu348@orion.oac.uci.edu (Andrew Schwartz Parker) KD6TGM writes:  
: I posted a similar question a few days back, but only got one response, so I'm  
: trying again. I live in suburban Southern California and I'm thinking about  
: buying the 1.2 GHz module for my Kenwood 741. I've heard many conflicting  
: opinions about 1.2 band in general. I would appreciate any info. at all on  
: this subject since I might buy the module in the next few weeks. Any little  
: bits of information would help in my decision process. Just for info., I'd  
: mostly be working off of high area coverage repeaters (5700 ft. elevation) out  
: of my car. Thanks for the help in advance.

By all means buy the 1280 module. Get a good antenna. You will be  
pleasently surprised that the band may work better than the 440 band. The  
noise floor at the repeater site is far quieter than uhf. No radar or high  
power pagers getting into the repeater receiver. The folks on 1280 are far  
friendlier. This band is the fastest growing repeater band in California.

--

Bob Wilkins      n6fri                      voice 440.250+ 100pl san francisco bay area  
bwilkins@holonet.net                      packet n6fri @ n6eeg.#nocal.ca.usa.na

-----

Date: Sat, 3 Jul 1993 23:03:31 GMT  
From: psinntp!iat.holonet.net!bwilkins@uunet.uu.net  
Subject: 1.2 GHz QUESTION (again)  
To: info-hams@ucsd.edu

marchbg@feenix.metronet.com (Marc Grant) writes:

:  
: 1200 MHz repeaters operate exactly like all the others, except that 1.2  
: is much more susceptible to attenuation by thick trees and shrubs, so it  
: usually works a lot better in the winter.  
:

Most of the thick vegetation died in the smog storm of 68 in southern cal :}

The band really works well in the urban canyons , it really bounces well around 40 story buildings. Signals penetrate well into interiors of concrete and steel structures. There is no intermod from pagers and other out of band signals. At this time there is no computer clock noise.

There are already 75 2.4 GHz repeaters operating in Japan. That band works. We need more activity on our upper bands. Remember 220 - 222 MHz ? In the final analysis no one was using the band. 200 users could not stop progress.

--

Bob Wilkins      n6fri                      voice 440.250+ 100pl san francisco bay area  
bwilkins@holonet.net                      packet n6fri @ n6eeg.#nocal.ca.usa.na

-----

Date: 4 Jul 93 09:39:24 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Center-Fed Antennas  
To: info-hams@ucsd.edu

I have tried various lengths of center-fed antennas and various lengths of 300 ohm ladder-line center sections connected to coax with and without baluns. Today I made some measurements at the coax/ladder-line junction without the coax connected and found that the antennas and transmission lines are behaving exactly as they are supposed to in theory.

I measured the resonant frequencies at the coax/ladder-line junction without the coax and found resonances close to integer multiples of  $f = 468 / \text{Length}$ . I measured impedances and found low resistive impedances at the odd harmonics and high resistive impedances at the even harmonics. All other frequencies had appreciable reactances.

Here's my conclusions: Any antenna similar to the G5RV, (center-fed with a twin-lead matching section connected to coax

through a balun or not), has a fundamental resonant frequency close to 468/Length. The matching section functions according to the equations for series-section transmission lines/transformers and the length of the right-angle matching section does not appreciably affect the resonant frequencies of the antenna. SWR is high except at odd multiples of the fundamental frequency. Any coax in the system is part of a transmission line transformer.

...and it was 111 degrees while I was doing all of this...

73, KG7BK, Cecil\_A\_Moore@ccm.hf.intel.com

-----  
Date: 4 Jul 93 06:35:23 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Daily Solar Geophysical Data Broadcast for 03 July  
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 184, 07/03/93  
10.7 FLUX=110.5 90-AVG=112 SSN=095 BKI=4342 3223 BAI=015  
BGND-XRAY=B3.1 FLU1=\*.E+\*\* FLU10=\*.E+\*\* PKI=5442 3223 PAI=020  
BOU-DEV=048,037,059,015,021,019,017,021 DEV-AVG=023 NT SWF=01:011  
XRAY-MAX= M1.6 @ 1102UT XRAY-MIN= B2.8 @ 0225UT XRAY-AVG= B7.2  
NEUTN-MAX= +001% @ 1830UT NEUTN-MIN= -004% @ 0510UT NEUTN-AVG= -0.8%  
PCA-MAX= +0.1DB @ 1555UT PCA-MIN= -0.2DB @ 1430UT PCA-AVG= -0.0DB  
BOUTF-MAX=55407NT @ 0110UT BOUTF-MIN=55333NT @ 1921UT BOUTF-AVG=55362NT  
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+079,+000,+000  
GOES6-MAX=P:+169NT@ 1637UT GOES6-MIN=N:-125NT@ 0344UT G6-AVG=+105,-027,-071  
FLUXFCST=STD:110,105,105;SESC:110,105,105 BAI/PAI-FCST=015,010,010/015,010,010  
KFCST=3344 3332 2233 3322 27DAY-AP=017,020 27DAY-KP=3343 3334 3234 5433  
WARNINGS=\*SWF;\*MAJFLR;\*PROTON;\*PCA  
ALERTS=\*\*MINFLR:M1.6/1N@1102,S13W26(7530)  
!!END-DATA!!

NOTE: The Effective Sunspot Number for 02 JUL 93 was 75.0.  
The Full Kp Indices for 02 JUL 93 are: 5- 3+ 3- 3+ 4- 3o 4- 5+

-----  
Date: Sat, 3 Jul 93 10:31:00 -0500  
From: usc!howland.reston.ans.net!agate!usenet.ins.cwru.edu!ncoast!pcohio!  
gary.gabriel@network.UCSD.EDU  
Subject: FT-202R  
To: info-hams@ucsd.edu

< Paul, GW7KES wrote: >

PJDG>I have the manual which includes a schematic, and calculations for  
PJDG>the crystal frequencies, and all that jazz. If you cannot find any  
PJDG>help in the states, mail me with your snail mail address, And I'll  
PJDG>put a photocopy in the post.

Thanks for the offer. I will see what turns up and then check back with  
you if all else fails.

As for the radio, do you know what the wattage out is ?

73 (from the colonies !)

Gary N8YSV

---

~ OLX 2.1 TD ~ It's only a hobby ... only a hobby ... only a

-----

Date: Sat, 3 Jul 1993 20:25:26 GMT

From: swrinde!gatech!howland.reston.ans.net!darwin.sura.net!knuth.mtsu.edu!raider!  
theporch!jackatak!root@network.UCSD.EDU

Subject: Repeater coordination, complaints?

To: info-hams@ucsd.edu

jimv@hienergy.East.Sun.COM (Jim Vienneau - Sun Microsystems) writes:

>

> Very cheap for the repeater owner perhaps, but not the users. Perhaps you

> didn't notice that PL decode is optional on most mobile rigs?

Ah...excuse me....Jim....you bought a "new" 2 meter mobile rig lately  
without PL??? Where? How much? Under \$100?

I think your response is outdated. The \_OLD\_ IC-27A that I bought some  
12 or so years ago had PL \*standard\*...bought another IC-27H at a  
HamFest as another good rig to have and it (obviously?) had PL as a  
standard feature. Me thinks you must be thinking of the rigs of 15 or  
more years ago....most of the past 6-8 sure have PL, or NO ONE would  
buy'em -- which is how come I asked if you got your rig for less than  
\$100!!! ;^)

> This is a cop-out. If everyone's running legal limit with PLs, what a fine  
> mess we'll have.

Well, if memory serves me well (and at my age, it often does not)

"legal limit" for a repeater is constrained NOT by the 1.5KW output  
limit, but rather by a complex formula involving Height Above Average  
Terrain -- HAAT....remember that one from your Extra exam?

At any rate, given the topography of CT (and MA and all of NE) running



power on a high tower seems reasonable given the "requirement" by club members who pay for repeaters that they be able to use that \$100 brick and bring up an autopatch-quality signal from anywhere they hear the repeater.

In Nashville, we hear Huntsville Alabama repeaters, in spite of the intervening miles and mountains. We live with it, as they do. The 34/94 machine here has a fairly hefty "pad" to prevent that problem of having Hunstville stations key up hte Nashville machine.

The key really \*IS\* cooperation, not law suits, not screaming and squealing to the FCC...and, the PL encoded solution does work, so why is this a problem...the PL encoders for individual rigs are only about \$30 (plus shipping) and take little or no skill to install (just far smaller fingers than mine! :^)

73

```

+-----+
| Jack GF Hill          |Voice: (615) 459-2636 -           Ham Call: W4PPT |
| P. O. Box 1685        |Modem: (615) 377-5980 -   Bicycling and SCUBA Diving |
| Brentwood, TN 37024  |Fax: (615) 459-0038 -     Life Member - ARRL |
| root@jackatak.raider.net - "Plus ca changer, plus ca la meme chose" |
+-----+

```

Date: Sun, 4 Jul 1993 02:45:00 GMT  
From: usc!howland.reston.ans.net!darwin.sura.net!martha.utcc.utk.edu!  
utkvx.utk.edu!rpadawer@network.UCSD.EDU  
Subject: REQUESTING CUSTOM CALLSIGNS ???  
To: info-hams@ucsd.edu

I had heard long ago a rumor that the FCC might eventually allow Extra class amateurs to request a specific callsign. There is a specific one I would like... Is there any truth to this rumor? Does anyone think this will happen?

Thanks for any comment.

Randy  
WA4FJF

Randy Padawer                  P.O. Box 1167                  Knoxville, TN 37902  
Telephone: (615) 637-7263 before 11 pm; leave message if not home.  
Internet: RPADAWER@UTKVX.UTK.EDU                  or                  GwRepRandy@AOL.COM  
Ham Radio Op: WA4FJF.      Ham Packet: WA4FJF @ N0ARY.#NOCAL.CA.USA.NA

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-----  
Date: 3 Jul 93 18:22:44 GMT  
From: usc!howland.reston.ans.net!gatech!asuvax!ncar!noao!amethyst!  
organpipe.uug.arizona.edu!iris4.chem.Arizona.EDU!dlatimer@network.UCSD.EDU  
Subject: RG-58 coax cable vs. RG-223  
To: info-hams@ucsd.edu

In article <C9Js0v.DMG@hpcvsnz.cv.hp.com>, tomb@lsid.hp.com (Tom Bruhns) writes:

|> J.D. Cronin (jdc3538@ultb.isc.rit.edu) wrote:

|>

|> : What is the difference between RG-58 and RG-223? Both are 50 ohms,  
|> : but RG-223 costs much more. RG-223 has more capacitance per foot,  
|> : so isn't it more lossy? Unfortunately, the ARRL antenna book does  
|> : not list the loss in db/100 ft for RG-223.

|>

|> Huh? My reference book lists both at 28.5pF/foot. Expect this for  
|> cables of the same impedance using the same insulation; it's pretty  
|> much a fact of life (unless the inner conductor is coiled to make  
|> a delay line).

|>

|> I'd expect slightly lower loss in the 223 because its inner  
|> conductor is solid instead of stranded, and because it's silver  
|> plated instead of tinned. For a discussion about how the  
|> stranded center conductor increases loss, see "RF Design"  
|> magazine of a bit over a year ago for an article, I think  
|> written by a fellow from Andrews Cable. It's a small-  
|> percentage effect.

Working from memory (without safety harness) 223 has a higher voltage rating,  
a slightly higher capacitance/foot and a tighter (or two layers??) ground  
weave. The information is in the Belden wire catalog, which I don't have  
here.

Darin

-----  
Date: 04 Jul 1993 03:58:43 GMT  
From: cronkite.cisco.com!pst@ames.arpa  
Subject: travel to europe license questions  
To: info-hams@ucsd.edu

I'm leaving for europe, and I was wondering what countries will allow  
me to operate without extensive reciprocol paperwork?

I only have a US Technician+ class license, so I may not qualify for most reciprocal work (I think most nations require a General)...?

I'm going to the UK, France, and Holland, and I was thinking of taking my 220 and 2m/440 radios. Do I need to get permission at embassies or consulate offices before I leave? Is it easy to get permission once I'm already there? Are there cases where I can just use my US callsign w/o any paperwork?

What are legal (and practical) bands that I can use?

I'm leaving monday, and this was sort of a last minute kind of thing. Please email me directly.

Paul

--

nequaquam vacuum

-----

Date: Fri, 2 Jul 1993 13:25:18 MDT

From: usc!math.ohio-state.edu!cyber1.cyberstore.ca!vanbc.wimsey.com!cs.ubc.ca!unixg.ubc.ca!kakwa.ucs.ualberta.ca!ersys!adec23!ve6mgs!usenet@network.UCSD.EDU

Subject: Two-Line Orbital Element Set Format

To: info-hams@ucsd.edu

As a service to the satellite user community, the following description of the NORAD two-line orbital element set format is uploaded to sci.space.news and rec.radio.amateur.misc on a monthly basis. The most current orbital elements from the NORAD two-line element sets are carried on the Celestial BBS, (513) 427-0674, and are updated daily (when possible). Documentation and tracking software are also available on this system. The Celestial BBS may be accessed 24 hours/day at 300, 1200, 2400, 4800, or 9600 bps using 8 data bits, 1 stop bit, no parity. In addition, element sets (also updated daily) and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

=====

Data for each satellite consists of three lines in the following format:

AAAAAAAAAA

1 NNNNNU NNNNAAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN

2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNNNN

Line 0 is a eleven-character name.

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical

to that used by NORAD and NASA. The format description is:

Line 1	
Column	Description
01-01	Line Number of Element Data
03-07	Satellite Number
10-11	International Designator (Last two digits of launch year)
12-14	International Designator (Launch number of the year)
15-17	International Designator (Piece of launch)
19-20	Epoch Year (Last two digits of year)
21-32	Epoch (Julian Day and fractional portion of the day)
34-43	First Time Derivative of the Mean Motion or Ballistic Coefficient (Depending on ephemeris type)
45-52	Second Time Derivative of Mean Motion (decimal point assumed; blank if N/A)
54-61	BSTAR drag term if GP4 general perturbation theory was used. Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63	Ephemeris type
65-68	Element number
69-69	Check Sum (Modulo 10) (Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2	
Column	Description
01-01	Line Number of Element Data
03-07	Satellite Number
09-16	Inclination [Degrees]
18-25	Right Ascension of the Ascending Node [Degrees]
27-33	Eccentricity (decimal point assumed)
35-42	Argument of Perigee [Degrees]
44-51	Mean Anomaly [Degrees]
53-63	Mean Motion [Revs per day]
64-68	Revolution number at epoch [Revs]
69-69	Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

```
NOAA 6
1 11416U      86 50.28438588 0.00000140      67960-4 0  5293
2 11416  98.5105  69.3305 0012788  63.2828 296.9658 14.24899292346978
```

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End of Info-Hams Digest V93 #818

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-----  
Date: 7 Jul 93 23:58:48 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: (none)  
To: info-hams@ucsd.edu

\*\*\*\*\* UNDELIVERABLE MAIL sent to edb, being returned by bigmac!edb \*\*\*\*\*  
mail: Error # 8 'Invalid recipient' encountered on system bigmac

Received: from ucsd.edu by bigmac.cns.BrockU.CA via SMTP (920110.SGI/  
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for edb id AA03549; Wed, 7 Jul 93 19:58:22 -0400

Received: by ucsd.edu; id AA06644

sendmail 5.67/UCSD-2.2-sun

Wed, 7 Jul 93 13:45:45 -0700

Message-Id: <9307072045.AA06644@ucsd.edu>

Date: Mon, 5 Jul 93 04:30:09 PDT

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V93 #820

To: Info-Hams@UCSD.EDU

Info-Hams Digest                      Mon, 5 Jul 93                      Volume 93 : Issue 820

Today's Topics:

Daily Solar Geophysical Data Broadcast for 04 July  
field strength vs. watts out  
GPS boards  
ICOM IC-D(elta)1A info requested  
Poster of the frequency spectrum  
REQUESTING CUSTOM CALLSIGNS ???  
tornado last night

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-----

Date: 5 Jul 93 05:56:14 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Daily Solar Geophysical Data Broadcast for 04 July  
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 185, 07/04/93  
10.7 FLUX=106.5 90-AVG=112 SSN=104 BKI=3322 2212 BAI=008  
BGND-XRAY=B3.5 FLU1=2.8E+05 FLU10=1.1E+04 PKI=\*333 1223 PAI=009  
BOU-DEV=023,031,010,017,013,010,008,013 DEV-AVG=015 NT SWF=03:035  
XRAY-MAX= M1.8 @ 1129UT XRAY-MIN= B2.4 @ 0537UT XRAY-AVG= C1.2  
NEUTN-MAX= +001% @ 1850UT NEUTN-MIN= -003% @ 1005UT NEUTN-AVG= -0.5%  
PCA-MAX= +0.0DB @ 2220UT PCA-MIN= -0.2DB @ 1500UT PCA-AVG= -0.0DB  
BOUTF-MAX=55366NT @ 1419UT BOUTF-MIN=55319NT @ 1752UT BOUTF-AVG=55349NT  
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:-000NT@ 0000UT G7-AVG=+070,+000,+000  
GOES6-MAX=P:+122NT@ 1649UT GOES6-MIN=N:-108NT@ 0136UT G6-AVG=+094,-022,-055  
FLUXFCST=STD:105,105,100;SESC:105,105,100 BAI/PAI-FCST=015,015,010/010,010,020  
KFCST=2234 1222 2234 1222 27DAY-AP=020,014 27DAY-KP=3234 5433 4433 3332  
WARNINGS=\*SWF;\*MAJFLR;\*PROTON  
ALERTS==\*MINFLR:M1.8/2B@1129UTC(7530);\*MINFLR:M1.6/1B@0750(7530)  
!!END-DATA!!

NOTE: The Effective Sunspot Number for 03 JUL 93 was 70.0.  
The Full Kp Indices for 03 JUL 93 are not available.

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Date: Mon, 05 Jul 1993 03:07:55 GMT  
From: usc!math.ohio-state.edu!cyber1.cyberstore.ca!nwnexus!ole!ssc!  
markz@network.UCSD.EDU  
Subject: field strength vs. watts out  
To: info-hams@ucsd.edu

Brian McMinn N5PSS (brian@amdcl2.amd.com) wrote:  
: I'm looking for a "rule of thumb" conversion from  
: watts applied to an isotropic radiator (or dipole) to field strength  
: at N meters so that my first pass at design will be within an order of  
: magnitude of the allowed limit. Any pointers to info appreciated.

$E_o = \sqrt{30 * G_t * P_t} / r$  where  $E_o$  is field strength,  $G_t$  is antenna  
power gain (the actual ratio, not dB),  $P_t$  is power (watts),  
and  $r$  is radius (meters).

The best write-up that I've got is chapter 6 (Propagation) in  
the "Television Engineering Handbook" by K. Blair Benson.  
(McGraw-Hill, 1986).

Also covered in "Reference Data For Radio Engineers" from Sams, and buried somewhere in "The ARRL Antenna Book".

Mark Zenier markz@ssc.wa.com markz@ssc.com

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Date: 4 Jul 1993 22:49:38 -0700  
From: swrinde!cs.utexas.edu!math.ohio-state.edu!cyber1.cyberstore.ca!  
vanbc.wimsey.com!vanbc.wimsey.com!not-for-mail@network.UCSD.EDU  
Subject: GPS boards  
To: info-hams@ucsd.edu

GEC Plessey make some modules, including a downconverter and a correlator, which look as though they could be a good place to start with a hobby class unit. I, too, am interested. Sample prices for the Plessey units are 30 to 100 bucks, I think, for the different types of modules

mark Fraser

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Date: 5 Jul 1993 07:11:17 +0200  
From: pipex!uknet!mcsun!sun4nl!hacktic!not-for-mail@uunet.uu.net  
Subject: ICOM IC-D(elta)1A info requested  
To: info-hams@ucsd.edu

Hello

I am looking for some more information about the ICOM IC-D(elta)1A 2/70/23 HT. I saw an ad about it in CQ Amateur Radio of June 1993, but no details were mentioned, except the price. So:

- 1) What are the technical specifications (sensitivity, mem. channels, freq. range etc.)
- 2) Is it easy modifiable to extend the frequency range, and use it as a scanner? If so what's the freq. range then?
- 3) If you have one, are you satisfied with it (would you buy it again, would you recommend it to someone else etc.)

Thanks for your time and trouble.

(I will post a summary on the net if you like).

73 de Martin

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|||  
.. /\ \ | \_ | Internet: zap@hacktic.nl  
| / \artin | | effels AX25: PE1EEC@PI8JOP.NLD.EU  
\\_/\_/

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Date: Mon, 5 Jul 1993 02:16:36 GMT  
From: swrinde!cs.utexas.edu!csc.ti.com!tilde.csc.ti.com!skitzo.dseg.ti.com!ernest!cmptrc!carter@network.UCSD.EDU  
Subject: Poster of the frequency spectrum  
To: info-hams@ucsd.edu

In article <xo\$@byu.edu> richard@alaska.et.byu.edu (Richard B. Christensen) writes:

>Anyone seen a poster describing the different band allocations?

Ahoy, Richard!

That depends on what band allocations you want. If you are wanting a good overview of the EM spectrum, there is an excellent chart covering 0-10<sup>24</sup> Hz on my office wall, which is attributed to:

"The Exploritorium"  
3601 Lyon St  
San Francisco, CA 94123

If you are looking for something specifically covering band allocations for radio services, I would point out that those are going to be different in each country, though not to the same extent as they will be different in each of the three ITU regions. Unfortunately, I have never really seen a good poster for this. Best I've come across are little cross-references for 3-30 MHz. I keep one like that in my wallet. The ARRL Operator's Manual is okay for that sort of thing. Check Chapter 1 of the latest edition.

Best I have seen for US ham band allocations are the kind that some of the radio manufacturers, Icom for instance, give away at hamfests. Icom will probably send you one of their sets (developed by Gordon West, WB6NOA) just for asking. Their customer service number is (206) 454-7619.

Sorry to say that none of these charts are really in-depth as to how the various bands are being used. Best reference for that would have to be the ARRL Rule Book.

Cheerio and GL!

--

Carter R. Bennett, Jr. - Scientist | "Oh my God! I \_AM\_ a nerd!!!"  
carter@scilab.lonestar.org - home | - C. Bennett, Sept 25, 1992, after  
carter@cmptrc.lonestar.org - work | realizing he had been talking about  
KI5SR | "market availability of preconfigured Toll-House cookies."





]I don't know if it was a tornado or just high winds. I have heard news  
]reports that said each. Our power is out and will probably be for  
]a long time. NSP is busy raising new poles all down the street.

It sounds like a downburst/microburst. This is where wind suddenly  
comes out of the bottom of a dying storm going straight down. When it  
hits the ground, it spreads out in all directions. I have witnessed  
microbursts which did almost exactly the damage you saw.

The clues indicating microburst rather than tornado:

- widespread minor damage (as opposed to either a big area of  
total devastation or a narrow, linear area of damage). Tornado  
strength goes up as they get wider.
- coincident heavy rain, which rarely occurs with a tornado and  
almost always occurs with a microburst (except here in the SW  
where the rain sometimes evaporates before it reaches the ground).

If you had reported very strong winds in one direction, and then later  
very strong ones in another direction, BEFORE the rain, a tornado would  
be more likely.

--

John Moore NJ7E, 7525 Clearwater Pkwy, Scottsdale, AZ 85253 (602-951-9326)  
john@anasazi.com ncar!noao!asuvax!anasaz!john anasaz!john@asuvax.eas.asu.edu  
"Government is the agent of those who are too refined to do their own mugging."  
Joseph Sobran

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Date: Mon, 5 Jul 1993 04:43:42 GMT  
From: news.cerf.net!pagesat!spssig.spss.com!feenix.metronet.com!  
marcbg@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <134084@netnews.upenn.edu>, <VX016B1w164w@jwt.oau.org>,  
<134433@netnews.upenn.edu>g  
Subject : Re: Closed Autopatches

In article <134433@netnews.upenn.edu> yee@mipg.upenn.edu (Conway Yee) writes:  
>The reason I refused to give the license is a matter of personal politics.  
>It is up to the club to justify why they need the license- not for me to  
>justify why I should not give it. Since they did not have a reason to need  
>the information, I consider the request a violation of my privacy. Yes,  
>they could obtain the same information from other sources but that does not  
>justify why I should willingly participate in an action which is a violation  
>of my rights. In the other club, there was a distinct reason- they wanted

>it for the purposes of operating the club station. I was interested in  
>operating this station and I agreed. In this case, no such reason exists.

This is ridiculous and childish. A club sets up rules, and, as a new member, it really is not for you to ask if the rules are valid. If you want to change the rules, join the club, become an officer, and institute change. Just don't sit around and bitch.

Another point: Don't you think that autopatch codes, closed autopatches, etc, are time-tested? Don't you think this has been thought about legally before well beyond your basic rules-and-regs knowledge.

Have you ever owned a repeater? Have you ever been a control operator? If you can answer yes to any of these questions, then you would understand why some people choose to close repeaters and/or autopatches.

I don't like closed repeaters, but they are a fact of life. After you sink thousands of dollars into a repeater system and find some Touch-Tone Charlie playing with your controller, or abusing your machine, the ideaology changes. You stop becoming so worldly and start becoming practical.

Go build a repeater system yourself, get a frequency allocation and a good location in a big city. Then maintain it for 5 years or so, then come back to the newsgroup and we'll see what you have to say then.

73, and, by the way, when you're in Dallas, you're welcome to have someone help you to use the DARC 146.88 phone patch. No, it's not opened, but it's always welcome for travelers.

--

Marc B. Grant, N5MEI	Internet: marcbg@feenix.metronet.com
	marcbg@esy.com
P.O. Box 850472	Telephone: 214-231-3998 (voice)
Richardson, TX 75085-0472	214-231-0025 (fax)

-----  
Date: Mon, 05 Jul 93 05:54:17 GMT  
From: usc!howland.reston.ans.net!wupost!emory!rsiatl!jgd@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <1993Jul11.231534.10843@mnemosyne.cs.du.edu>, <w4hx86n@dixie.com>,  
<1993Jul14.232407.26974@mnemosyne.cs.du.edu>  
Subject : Re: Repeater coordination, complaints?

mwgordon@nyx.cs.du.edu (Mike Gordon) writes:

>In article <w4hx86n@dixie.com> jgd@dixie.com (John De Armond) writes:  
>>mwgordon@nyx.cs.du.edu (Mike Gordon) writes:

>>

>>> Was the other station running legal limit on a high tower?

>>

>>Define "legal limit", Mike. I'll give you a hint about it though.

> The true legal limit is the minimum amount of power (under 1.5kw) that  
>is needed to maintain "reasonable" communications. Of course, many hams  
>(wrongly) equate the legal limit with the maximum power that they can EVER  
>legally run (1.5kw). This incorrect reasoning has caused the phrase "legal  
>limit" to be generally accepted as meaning 1.5kw. This is exactly the same  
>thing as the general public calling all photocopiers "Xerox machines" and  
>clear tape "Scotch tape".

I'll take this tangential discussion as an "I don't know" to my question.  
What I thought.

>>It doesn't really matter. High site-to-high site is horizon limited.

>

^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

>>A couple of watts goes about as far as a couple KW.

> This is correct, but not what we are talking about. The offending  
>repeater is on the same frequency as the poster's repeater's OUTPUT.  
>Therefore, the signal is high site (offending repeater) to low sites  
>(mobiles and portables).

Playing know-it-all, you suggested the repeater that interefered with our  
machine was also running the legal limit. It was evident you didn't know  
the difference.

>>Running more power than the average mobile is useless  
>>because the repeater can't hear the mobile.

> The people running the repeater that the original poster was refering to  
>must not have ever spoken to you, and therefore, they are still ignorant of  
>this concept.

Since you don't know that or even know the definition of the legal max,  
I'll take that as an "I have no idea."

John

--

John De Armond, WD40QC	Interested in high performance cars?
Performance Engineering Magazine(TM)	Interested in high tech and computers?
Marietta, Ga	Send ur snail-mail address to

jgd@dixie.com | perform@dixie.com for a free sample mag  
The Great Tragedy of the 20th century is that Clinton's name isn't on the Wall.

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End of Info-Hams Digest V93 #820  
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End of Info-Hams Digest V93 #830  
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